



Robert Greene Sterne
Edward J. Kessler
Jorge A. Goldstein
David K.S. Cornwell
Robert W. Esmond
Tracy-Gene G. Durkin
Michele A. Cimbalà
Michael B. Ray
Robert E. Sokohl
Eric K. Steffe
Michael Q. Lee
Steven R. Ludwig
John M. Covert
Linda E. Alcorn
Robert C. Millionig
Donald J. Featherstone
Timothy J. Shea, Jr.
Lawrence B. Bugaisky
Michael V. Messinger
Judith U. Kim

Patrick E. Garrett
Jeffrey T. Helvey
Heidi L. Kraus
Eldora L. Ellison
Thomas C. Fiala
Albert L. Ferro
Donald R. Banowitz
Peter A. Jackman
Teresa U. Medler
Jeffrey S. Weaver
Kendrick P. Patterson
Vincent L. Capuano
Brian J. Del Buono
Virgil Lee Beaton
Theodore A. Wood
Elizabeth J. Haanes
Joseph S. Ostroff
Frank R. Cottingham
Christine M. Lhulier
Rae Lynn P. Guest

George S. Bardmesser
Daniel A. Klein
Jason D. Eisenberg
Michael D. Specht
Andrea J. Kamage
Tracy L. Muller
Jon E. Wright
LuAnne M. DeSantis
Ann E. Summerfield
Aric W. Ledford
Helene C. Carlson
Cynthia M. Bouchez
Timothy A. Doyle
Gaby L. Longworth
Lori A. Gordon
Nicole D. Dretar
Ted J. Ebersole
Jyoti C. Iyer
Laura A. Vogel

Michael J. Mancuso
Bryan S. Wade
Aaron L. Schwartz
Michael G. Penn
Shannon A. Carroll
Wesley W. Jones
Matthew E. Kelley
Nicole R. Kramer

Registered Patent Agents •
Karen R. Markowicz
Nancy J. Leith
Matthew J. Dowd
Katrina Yujian Pei Quach
Bryan L. Skelton
Robert A. Schwartzman
Teresa A. Colella
Jeffrey S. Lundgren
Victoria S. Rutherford

Michelle K. Holoubek
Simon J. Elliott
Julie A. Heider
Mita Mukherjee
Scott M. Woodhouse
Christopher J. Walsh
Liliana Di Nola-Baron
Peter A. Socarras
Jeffrey Mills

Of Counsel
Kenneth C. Bass III
Evan R. Smith
Marvin C. Guthrie

* Admitted only in Maryland
* Admitted only in Virginia
• Practice Limited to Federal Agencies

June 28, 2005

WRITER'S DIRECT NUMBER:
(202) 772-8674
INTERNET ADDRESS:
MLEE@SKGF.COM

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Art Unit 2634

Attn: Mail Stop Issue Fee

Re: U.S. Utility Patent Application ✓
Application No. 09/632,855; Filed: August 4, 2000
For: Wireless Local Area Network (WLAN) Using Universal Frequency
Translation Technology Including Multi-Phase Embodiments
Inventors: Sorrells *et al.*
Our Ref: 1744.0630001

Sir:

Transmitted herewith for appropriate action are the following documents:

1. Fifth Supplemental Information Disclosure Statement;
2. Form PTO-1449 (3 pages) with (1) accompanying document (Doc. Ref. AQ59);
3. Return postcard; and
4. PTO-2038 Credit Card Payment Form for \$180.00 to cover:
\$180.00 for IDS Late Filing Surcharge.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier. In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents
June 28, 2005
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,


STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Michael Q. Lee
Attorney for Applicants
Registration No. 35,239

Enclosures

MQL/JTH/agj
413600_1.DOC



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

SORRELLS *et al.*

Appl. No.: 09/632,855

Filed: August 4, 2000

For: **Wireless Local Area Network
(WLAN) Using Universal
Frequency Translation
Technology Including Multi-
Phase Embodiments**

Confirmation No.: 2274

Art Unit: 2634

Examiner: Curtis B. Odom

Atty. Docket: 1744.0630001

Fifth Supplemental Information Disclosure Statement

Mail Stop Issue Fee

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this Fourth Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Fourth Supplemental Information Disclosure Statement filed on January 31, 2005 in connection with the above-captioned application.

Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may

not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

Applicants provide the following comments regarding the documents:

Documents AF60-AI60 and AA61-AD61 were cited in an Office Action, mailed April 1, 2005, in related U.S. Patent Application No. 09/855,851, filed May 16, 2001, entitled "Apparatus, System, and Method for Down-Converting and Up-Converting Electromagnetic Signals," directed to related subject matter.

Document AQ59 was cited in a Notice of Allowance, mailed April 14, 2005, in related U.S. Patent Application No. 10/290,323, filed November 8, 2002, entitled "Method and Apparatus for DC Offset Removal in a Radio Frequency Communication Channel," directed to related subject matter.

Document AE61 was cited in an Office Action, mailed May 18, 2005, in related U.S. Patent Application No. 09/550,642, filed April 14, 2000, entitled "Method And System For Down-Converting An Electromagnetic Signal, And Transforms For Same," directed to related subject matter.

Document AF61 was cited in an Office Action, mailed May 19, 2005, in related U.S. Patent Application No. 09/476,092, filed January 3, 2000, entitled "Analog Zero If Fm Decoder And Embodiments Thereof, Such As The Family Radio Service," directed to related subject matter.

Documents AG61-AI61 and AA62 were cited in an Office Action, mailed June 1, 2005, in related U.S. Patent Application No. 09/567,977, filed May 10, 2000, entitled

"Optical Down-Converter Using Universal Frequency Translation Technology," directed to related subject matter.

This statement should not be construed as a representation that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

Filing under 37 C.F.R. § 1.97(d) This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Notice of Allowance, but before payment of the Issue Fee. Enclosed find our PTO-2038 Credit Card Payment Form in the amount of \$180.00 in payment of the fee under 37 C.F.R. § 1.17(p); in addition:

Statement under 37 C.F.R. § 1.97(e)(2). I hereby state that no item of information in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. § 1.97(e)(2).

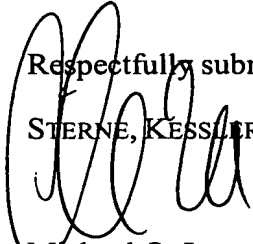
A copy of document AQ59 is enclosed. However, in accordance with 37 C.F.R. § 1.98(a)(2), copies of the U.S. patents and patent application publications cited on the attached Form PTO-1449 are not enclosed.

It is respectfully requested that the Examiner initial and return a copy of the enclosed Form PTO-1449, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.


Michael Q. Lee

Attorney for Applicants
Registration No. 35,239

Date: 6/28/05

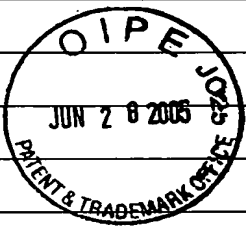
1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

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FORM PTO-1449

ATTY. DOCKET NO.
1744.0630001APPLICATION NO.
09/632,855FIFTH SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENTINVENTORS
SORRELLS *et al.*FILING DATE
August 4, 2000ART UNIT
2634

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA						
	AB						
	AC						
	AD						
	AE						
	AF60	4,789,837	12/1988	Ridgers			
	AG60	5,634,207	05/1997	Yamaji <i>et al.</i>			
	AH60	5,642,071	06/1997	Sevenhans <i>et al.</i>			
	AI60	6,211,718 B1	04/2001	Souetinov			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

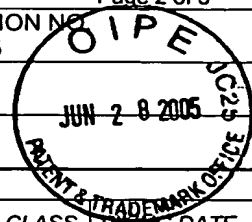
EXAMINER INITIAL	DOC. REF.	CITATION
	AN	
	AO	
	AP	
	AQ59	Hellwarth, G.A. and Jones, G.D, "Automatic Conditioning of Speech Signals," <i>IEEE Transactions on Audio and Electroacoustics</i> , Vol. AU-16, No. 2, pp. 169-179 (June 1968).
	AR	

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
	AA61	6,212,369 B1	04/2001	Avasarala			
	AB61	6,308,058 B1	10/2001	Souetinov <i>et al.</i>			
	AC61	6,633,194 B2	10/2003	Arnborg <i>et al.</i>			
	AD61	2001/0036818 A1	11/2001	Dobrovolny			
	AE61	6,057,714	05/2000	Andrys <i>et al.</i>			
	AF61	2003/0081781 A1	05/2003	Jensen <i>et al.</i>			
	AG61	5,994,689	11/1999	Charrier			
	AH61	6,512,544 B1	01/2003	Merrill <i>et al.</i>			
	AI61	6,628,328 B1	09/2003	Yokouchi <i>et al.</i>			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
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	AK						Yes No
	AL						Yes No
	AM						Yes No

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

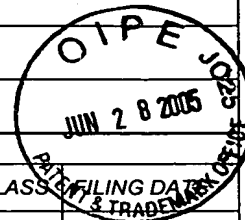
EXAMINER INITIAL	DOC. REF.	CITATION
	AN	
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U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOC. REF.	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE & TRADEMARK OFFICE
	AA62	6,801,253 B1	10/2004	Yonemoto <i>et al.</i>			
	AB						
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						

FOREIGN PATENT DOCUMENTS

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	AJ						Yes No
	AK						Yes No
	AL						Yes No
	AM						Yes No

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